UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,388	07/09/2001	Dean Furbush	JRL-4010-133	9349

23117   7590   11/21/2011
NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER
SUBRAMANIAN, NARAYANSWAMY

ART UNIT	PAPER NUMBER
3695	

MAIL DATE	DELIVERY MODE
11/21/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *13 September 2011*.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on
_____ ; the restriction requirement and election have been incorporated into this action.
4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5) ☒ Claim(s) *1-17 and 29-49* is/are pending in the application.
  5a) Of the above claim(s) _____ is/are withdrawn from consideration.
6) ☐ Claim(s) _____ is/are allowed.
7) ☒ Claim(s) *1-17 and 29-49* is/are rejected.
8) ☐ Claim(s) _____ is/are objected to.
9) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10) ☐ The specification is objected to by the Examiner.
11) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☐ All b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   This office action is in response to applicants' communication filed on September 13,

2011. Amendments to claims 1, 8, 9, 11-16, 29, 33, 34, 40 and 45 have been entered. Claims 1-

17 and 29-49 are pending in the application and have been examined. The rejections and

response to arguments are stated below.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

3.   Claims 1-17 and 29-49 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

Claim 1 recites "the graphical user interface including a field that allows the user to

choose a priority type for how the order executes with contra side quotes/orders in the trading

venue". The metes and bounds of this limitation are unclear. In particular it is not clear what the

Applicants mean by the phrases "allows" and "how the order executes with contra side

quotes/orders". For instance it is not clear as to what is the result of allowing the user to choose a

priority type. Is the order priority chosen or is it not? Allowing a user to perform a function does

not necessarily imply that the function is performed. Similarly in claims 29, 34, 40 and 45 the

metes and bounds of the limitation "a priority type for how the order executes with contra side

quotes/orders in the trading venue" are unclear. Dependent claims are rejected by way of

dependency on a rejected claim.

Claim 2 recites "wherein the client system is coupled to a network" and "a server system coupled to the network". It is not clear if the network is a part of the claimed system. Hence the scope of the claim is unclear.

Claims 9-16 recite the limitation "the server system". This limitations lack antecedent basis.

Claim 33 recites the limitation "the graphical user interface including a field that allows a user to form the order and to choose a priority type for how the order executes with contra side quotes/orders in the trading venue" is not further limiting on the claim. In particular it is not clear what the Applicants mean by the phrases "allows" and "how the order executes with contra side quotes/orders". The metes and bounds of this limitation are unclear. See rejection of claim 1 for details.

Claims 34-39 claim a method but recite the features of a system (e.g. the client system including a display that renders a graphical user interface including a field for providing a priority type for how the order executes with contra side quotes/orders in the trading venue). Claims 34-39 are not sufficiently precise due to the combining of two different statutory classes of invention in a single claim. The preamble the claim refers to a method, but the body of the claim discusses the specifics of a system. A claim is considered indefinite if it does not apprise those skilled in the art of its scope. *Amgen, Inc. v. Chugai Pharm.* Dependent claims 35-39 are rejected based on similar reasoning and by virtue of dependence on a rejected independent claim.

Claim 40 recites "A system for trading of securities in an electronic trading venue, the system comprises: a processor; and memory coupled to the processor, the system configured to …". However it is not clear as what the functions of the system components (namely the

memory and the processor) are in performing the steps listed in the claim. Hence the scope of the claim is unclear.

Claim 41 recites "The system of claim 40 wherein the specified priority is that the order executes against contra side interest in price/time priority, and the system is further configured to ...". It is not clear which system the Applicants are referring to. There are two different systems mentioned in claim 40 (namely a system for trading of securities and a client system). Claims 42-44 suffer from similar ambiguities.

Claim Interpretation

4.   Independent claim 1 recites the limitation "the order of a type that is executable against any participant that can at least in part satisfy at least a portion of the specified quantity of the order" is interpreted as non-functional descriptive material because it only describes the order. It does not in any material way affect the step of entering the order. There is nothing in the cited limitation that shows how the entering step is altered as a result of the description of the order. This claim further recites the limitation "the graphical user interface to form the order and the graphical user interface including a field that allows the user to choose a priority type for how the order executes with contra side quotes/orders in the trading venue" is interpreted as non-functional descriptive material because it only describes the information in the graphical user interface (GUI). It does not in any material way affect the feature of the display rendering a graphical user interface. There is nothing in the limitation that further limits how the graphical user interface is rendered.

Claim 2 recites "wherein the client system is coupled to a network". The "wherein" clause in a claim describes the intended use of the limitations they are associated with. The

intended use language in the claim merely states the result of the limitation in the claim and adds nothing to the patentability or substance of the claim. [See *Texas Instruments Inc. v. International Trade Commission*, 26 USPQ2d 1010 (Fed. Cir 1993); *Griffin v. Bertina*, 62 USPQ2d 1431 (Fed. Cir. 2002); *Amazon.com Inc. v. Barnesandnoble.com Inc.*, 57 USPQ2d 1747 (Fed. Cir. 2001). Hence the intended use limitations are not given patentable weight. Similarly in the other claims the "wherein" clauses are interpreted as intended use limitations that does not further limit the claim.

In general, the grammar and intended meaning of terms used in a claim will dictate whether the language limits the claim scope. Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. The following are examples of language that may raise a question as to the limiting effect of the language in a claim:

(A) statements of intended use or field of use,

(B) "adapted to" or "adapted for" clauses,

(C) "wherein" clauses, or

(D) "whereby" clauses.

This list of examples is not intended to be exhaustive. See also MPEP § 2111.04.

Claim 34 recites "how the order executes with contra side quotes/orders in the trading venue" is interpreted as an intended use of the server computer system.

Similarly in claims 40 and 45, the limitation "how the order executes with contra side quotes/orders in the trading venue" is interpreted as an intended use of the receiving step.

Similar reasoning and interpretations apply for the dependent claims.

The rejections given below are interpreted in light of the 112, second paragraph rejections

and claim interpretation discussed above.

Claim Rejections - 35 USC § 101

5.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6.   Claims 34-39 are rejected under 35 U.S.C. § 101 because the claimed invention is

directed to non-statutory Subject matter.

35 USC 101 requires that in order to be patentable the invention must be a "**new and**

useful process, machine, manufacture, or composition of matter, or any new and useful

improvement thereof" (emphasis added).

Claims 34-39 are intended to embrace or overlap two different statutory classes of

invention as set forth in 35 § U.S.C. §101. (See rejection under 112, second paragraph for

details) "A claim of this type is precluded by express language of 35 U.S.C. §101 which is

drafted so as to set forth statutory the statutory classes of invention in the alternative only", *Ex*

parte Lyell (17USPQ2d 1548).

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 1, 2, 5, 17, 29, 31-34, 37, 40, 44, 45 and 49 are rejected under 35 U.S.C. 103(a) as

being unpatentable over May (US Pub No. 2002/013890 A1).

Claim 1 May teaches a system for an electronic venue for trading of securities

comprising: a client system for entering an order to buy or sell a specified quantity of a security,

the order of a type (buy and sell are the order types) that is executable against any participant that

can at least in part satisfy at least a portion of the specified quantity of the order (See the entire

disclosure of May particularly Figure 2, 14-A); the client system including: a computing system

(See the entire disclosure of May particularly Figure 2); a display coupled to the computing

system (See the entire disclosure of May particularly Figure 2), the display rendering a graphical

user interface, the graphical user interface to form the order and the graphical user interface

including a field that allows the user to choose a priority type for how the order executes with

contra side quotes/orders in the trading venue (See the entire disclosure of May particularly

Figures 2, 6-9B, 14A-B, Paragraphs 39-58, 72, 111-115, 273-276, 283-285, the "good until …"

option is an example of order priority type. For example the good until time order will execute

against the contra side quotes/orders if such contra side quotes/orders are available within the

time specified. Similarly credit preference is an example of order priority type).

Claim 2, May teaches the feature wherein the client system is coupled to a network, the

system further comprising: a server system coupled to the network that receives the order from

the client system and executes the order against interest in the trading venue based on the priority

type chosen by the user (See the entire disclosure of May particularly Figures 2-4, 6-9B, 14A-B,

30-34, Paragraphs 39-58, 72, 111-115, 273-276, 283-285, 340-351, 363-369).

Claim 29, May teaches a computer program product for an electronic trading venue for trading of securities said computer program product tangibly embodied on a computer readable storage medium comprising instructions for causing a computer to (See the entire disclosure of May particularly Paragraphs 31-32): receive an order entered from a client system, the order to buy or sell a specified quantity of a security, the order of a type that is executable for execution against any participant that can at least in part satisfy at least a portion of the specified quantity of the order (See the entire disclosure of May particularly Figures 2, 14A-B, Paragraphs 267, 278, 288-290, 340, 358, 369-371); and determine from the received order a priority type for how the order executes with contra side quotes/orders in the trading venue (See the entire disclosure of May particularly Figures 2, 6-9B, 14A-B, Paragraphs 39-58, 72, 111-115, the "good until …" option and credit preference are examples of order priority type); and execute the order against contra-side interest according to the determined priority type (See the entire disclosure of May particularly Figures 2, 6-9B, 14A-B, Paragraphs 267, 278, 288-290, 340, 358, 369-371).

Claim 33, May discloses the feature of generating a graphical user interface, the graphical user interface including a field that allows a user to form the order and to choose a priority type for how the order executes with contra side quotes/orders in the trading venue (See the entire disclosure of May particularly Figures 2, 6-9B, Paragraphs 39-58, 72, 111-115, credit preference is an example of order priority type).

Claim 34, May teaches a method for trading of securities in an electronic trading venue, the method comprises: receiving from a client computing system an order executable against any participant that can at least in part satisfy the order, the client system including a display that renders a graphical user interface including a field for providing a priority type for how the order

executes with contra side quotes/orders in the trading venue; and executing by a server computer system the order according to the priority type for how the order executes with contra side quotes/orders in the trading venue (Please see rejection of claims 1 and 2).

Claim 40, May teaches a system for trading of securities in an electronic trading venue, the system comprises: a processor; and memory coupled to the processor, the system configured to receive from a client system that displays a graphical user interface, an order executable against any participant that can at least in part satisfy the order, with the order having a user-selectable field specifying a priority type for how the order executes with contra side quotes/orders in the market (See the entire disclosure of May particularly Figures 2, 14A-B, Paragraphs 267, 278, 288-290, 358, 369-371); and execute the order against contra side orders in the trading venue in accordance with the priority type specified by the order (See the entire disclosure of May particularly Figures 2, 14A-B, Paragraphs 267, 273-278, 288-290, 358, 369-371). The limitation "a client system that displays a graphical user interface" is interpreted as an intended use of the client system without any bearing on how the order is received or executed by the computer system. Hence this limitation is not given patentable weight.

Claim 45, May teaches a computer program product for an electronic trading venue for trading of securities said computer program product tangibly embodied on a computer readable storage device comprising instructions for causing a computer to (See the entire disclosure of May particularly Paragraphs 31-32): receive from a client system that displays a graphical user interface, an order executable against any participant that can at least in part satisfy the order, with the order specifying a priority type for how the order executes with contra side quotes/orders in the market (See the entire disclosure of May particularly Figures 2, 14A-B,

Paragraphs 267, 278, 288-290, 358, 369-371); determine from the order the priority type

specified by the order (See the entire disclosure of May particularly Figures 2, 6-9B, 14A-B,

Paragraphs 39-58, 72, 111-115, credit preference is an example of order priority type); and

execute the order against contra side orders in the trading venue in accordance with the priority

type specified by the order (See the entire disclosure of May particularly Figures 2, 14A-B,

Paragraphs 267, 278, 288-290, 340, 358, 369-371). The limitation "a client system that displays a

graphical user interface" is interpreted as an intended use of the client system without any

bearing on how the order is received or executed by the computer system. Hence this limitation

is not given patentable weight.

Claims 17, 32, 44 and 49 May teaches the feature wherein the order is a non-directed

order, which is an order that is not directed to any particular participant (Implied in the

disclosure of May).

Claims 5, 31, and 37, May discloses the feature wherein one of the priorities is that the

order executes against displayed contra side interest in price/time priority (See the entire

disclosure of May particularly Paragraphs 284, 299, 315)

9.   Claims 3, 4, 6-16, 30, 35-36, 38, 39, 41-43 and 46-48 are rejected under 35 U.S.C. 103(a)

as being unpatentable over May (US Pub No. 2002/013890 A1) in view of NASD Rulemaking

Reference (Reference U in PTO-892 mailed March 18, 2008).

Claims 3, 4, 6-16, 30, 35-36, 38, 39, 41-43 and 46-48, May teaches a system, a computer

program product and a method of claims 1, 29, 34, 40 and 45 respectively as discussed above.

May does not explicitly teach the features included in claims 3, 4, 6-16, 30, 35-36, 38, 39,

41-43 and 46-48.

Reference U teaches the features in these claims (See the disclosure of Reference U). It

would have been obvious to one of ordinary skill in the art at the time of invention to combine

the features taught by Reference U to the invention of May. The motivation to combine is that

the combined system will bring together a broad range of participants into a single, integrated

electronic system that will maximize the role of each participant to the ultimate benefit of all

participants in the Nasdaq Stock Market as a whole - individual and institutional investors, order-

entry broker-dealers, market makers, and ECNs (See page 2 of Reference U).

Response to Arguments

10.   In response to Applicants' arguments on page 14 of remarks "These claims (34-39) are

directed to a method and are not directed to two statutory classes. Applicant suggests that the

examiner revisit *Lyell* and observe that there was an explicit attempt to cover two statutory

classes in the preamble of the claim decided by the court. *Lyell* does not preclude a claim to a

method that operates by use of a machine such as a computer, as the examiner reasons", the

Examiner respectfully disagrees. While the Examiner agrees that a method may include steps that

operates by use of a machine such as a computer, claiming the steps of the method and the

features of the machine in the same claim is an attempt to cover two statutory classes in the same

claim. Claims 34-39 are drawn to a method but recite the features of a system (e.g. the client

system including a display that renders a graphical user interface including a field for providing a

priority type for how the order executes with contra side quotes/orders in the trading venue).

Claims 34-39 are not sufficiently precise due to the combining of two different statutory classes

of invention in a single claim. The preamble the claim refers to a method, but the body of the

claim discusses the specifics of a system. A claim is considered indefinite if it does not apprise

those skilled in the art of its scope. *Amgen, Inc. v. Chugai Pharm.* For these reasons the rejection

under 35 USC 101 is maintained.

In response to Applicant's arguments on page 15 of the remarks "Nothing in Figure 2

corresponds to: "'the graphical user interface including a field to choose a priority type for how the

order executes with contra side quotes/orders in the trading avenue", the Examiner would like to

point out that May Figure 14A clearly shows a field for entering the "Good until" time. This

feature is an example of order priority.

In response to Applicant's arguments on page 17 of the remarks "Nothing in these passages

or elsewhere in May describes or renders obvious: " the graphical user interface including a field ...

to choose a priority type for how the order executes with contra side quotes/orders in the trading

venue", the Examiner would like to point out that May Figure 14A clearly shows a field for

entering the "Good until" time. This feature is an example of order priority. The credit preference

of the traders is another example of order priority type. Both these are explicitly taught by the

disclosures of May.

In response to Applicant's arguments on page 17 of the remarks "The examiner confuses

execution "priority type" with an "order type" and therefore clearly shows that May does not teach

the claimed feature. To advance prosecution, Applicant has clarified the feature to require

"execution priority." The examiner appears to take the position that "priority" as claimed is the

same as "the type of order, e.g., "good till canceled." A good till canceled order neither describes

nor suggests nor has any mechanism to control "a priority" type" i.e., execution priority" for how

the order executes with contra side quotes/orders in the trading venue. It merely specifies the

duration of time when the order, if still in the system is available for execution", Examiner

respectfully disagrees. The buy/sell order in May describes the order type. The "Good until" option

and the credit preference of the traders are examples of order priority type. Both these are

explicitly taught by the disclosures of May. The phrase "execution priority" is not recited

anywhere in the claims.

In response to Applicant's arguments on page 18 of the remarks "Claim 29 includes the

feature of instructions to: "determine from the received order, a priority type for how the order

executes with contra side quotes/orders in the trading venue." Claim 29 is neither described nor

rendered obvious by May for analogous reasons discussed above", the Examiner would like to

point out that May in paragraphs 340-351, 363-369 discloses how the credit preferences are taken

into account before matching the orders.

Applicant's other arguments with respect to pending claims have been considered but are

either not persuasive or they are moot in view of the new ground(s) of rejection.

Conclusion

11.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure are listed on the enclosed PTO-892.

12.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Narayanswamy Subramanian whose telephone number is (571)

272-6751. The examiner can normally be reached Monday-Thursday from 8:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Charles R. Kyle can be reached at (571) 272-6746. The fax number for Formal or Official faxes

and Draft to the Patent Office is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PMR or Public PAIR. Status information for unpublished

applications is available through Private PMR only. For more information about the PMR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Narayanswamy Subramanian/
Primary Examiner
Art Unit 3695

November 15, 2011